

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 May 2005 (19.05.2005)

PCT

(10) International Publication Number
WO 2005/044004 A1

(51) International Patent Classification⁷: **A01N 25/04**

LG Life Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu,
Daejeon 305-380 (KR).

(21) International Application Number:

PCT/KR2004/002838

(74) Agent: **CHOI, Kyu-Pal**; Halla Classic Building 4F.,
824-11, Yeoksam-dong, Kangnam-gu, Seoul 135-080
(KR).

(22) International Filing Date:

4 November 2004 (04.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10-2003-0077854

5 November 2003 (05.11.2003) KR

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SI, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*): **LG LIFE
SCIENCES LTD.** [KR/KR]; LG Twin Tower, East Tower,
20, Yoido-dong, Youngdeungpo-gu, Seoul 150-010 (KR).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **KANG, Kyung-Goo**
[KR/KR]; R & D Park, LG Life Sciences Ltd., 104-1,
Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR). **KIM,
Dal-Soo** [KR/KR]; R & D Park, LG Life Sciences Ltd.,
104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380 (KR).
CHUN, Sam-Jae [KR/KR]; R & D Park, LG Life Sciences
Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon 305-380
(KR). **LEE, Sang-Who** [KR/KR]; R & D Park, LG Life
Sciences Ltd., 104-1, Moongi-dong, Yuseong-gu, Daejeon
305-380 (KR). **JOE, Goon-Ho** [KR/KR]; R & D Park,

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: **FUNGICIDAL MICROEMULSION**

(57) Abstract: The present invention relates to a stable microemulsion composition comprising metalaxyl-M(methyl N-(methoxy-
acetyl)-N-(2,6-xylyl)-D-alaninate) used for agricultural fungicide as active ingredient. Specifically, the microemulsion composition
of the present invention is characterized in that the phase is not destroyed at a wide range of temperature during storage to remain
stable, even if the composition comprises a high concentration of active ingredient. Also, the microemulsion composition of the
present invention can form stable microemulsion in a wide range of dilution concentration, even if the composition is diluted with
water.

WO 2005/044004 A1